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Cape Verde and Mozambique as development successes in Sub-Saharan Africa

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ABSTRACT. *This paper assesses the extent to which Cape Verde and Mozambique reveal a positive interaction between globalization and governance in the orientation and predictability of economic policies, as well as the accompanying institutional arrangements. Economic success under globalization involves market perceptions regarding outcomes such as export diversification and narrowing of the income gap with the frontier. Economic success is in turn sustained by good governance and political and economic freedom. The context is provided by cooperation agreements to which Cape Verde and Mozambique belong, notably in their respective sub region of Africa, where a convergence-diversification regime and a divergence-specialization regime can be defined. Comparing regimes across sub regions, we find that West Africa countries are becoming more diversified whilst in Southern Africa they are becoming more specialized. Opening up to trade is also an important driver of both convergence and diversification for the former, especially in the range of 45-75% of GDP, but not for the latter. Finally, in the Southern Africa convergence-diversification regime, economic and political freedom drive convergence, suggesting effective institutional arrangements.*

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1. Introduction

In less than one year, the global financial crisis turned the risk of excluding Africa economies from globalization into the certainty that poverty would worsen in most. Prior to this crisis, however, Africa accompanied the trend of sustained growth evidenced by emerging economies, which was the strongest in decades (*African Economic Outlook*, 2009, World Bank, 2009), primarily due to the implementation of adequate structural and macroeconomic policies. In Sub-Saharan Africa (SSA), GDP growth increased from an average of 3.5 percent in 2000 to 5.7 percent by 2005 and Burkina Faso, Ethiopia, Mali, Mozambique, Tanzania, and Uganda, none of which is a major primary commodity producer, were able to post annual growth rates of over 5 percent in recent years (United Nations *Africa Report*, 2008).

Indeed, the expansion, diversification and deepening of trade and financial links between countries over several decades presented an unparalleled opportunity to raise living standards and achieve the Millennium Development Goals (MDGs). Notwithstanding Africa's improved economic situation during the last few years, absolute poverty was still widespread when unprecedented energy and food price volatility brought worldwide expansion to a halt. Amidst dire global economic prospects, growth enhancing policies need to be assessed against progress on MDGs, including the global partnership on development and prospects for international cooperation.

To be sure, the evidence suggests that development success under globalization is less a question of relative resource endowments or geographical location than in past waves of globalization. Market perception of the orientation and predictability of national economic policies, and the accompanying institutional arrangements, have proved to be decisive

everywhere. The Asian crises of the mid 1990s showed that economic openness must be accompanied by good public and private sector governance in order for countries to take full advantage of globalization. Examples of the former include sound macroeconomic policies, unfailing transparency, stable and rational incentive frameworks and robust financial systems coupled with effective supervisory and regulatory mechanisms. There is no universally applicable development model, however, as severe regulatory failures also occurred in developed countries. Adequate development responses to globalization thus become all the more important as globalization increasingly affects political and economic governance, mainly by reducing national policy space and increasing institutional and economic interdependence at various levels. At the same time, a more integrated global economic context necessarily demands greater policy and institutional coherence as well the knowledge required to implement the associated reforms.

In this regard, we note that regional economic integration remains a valid intermediate step toward the integration of developing countries into the world economy. In addition to benefiting from regional economies of scale, their participation in reform programs within regional organizations also facilitates domestic authorities' work when implementing politically difficult measures. Regional surveillance and peer pressure between the various partners – such as that offered by the African Peer Review Mechanism - may also help reduce the risks of macroeconomic slippage, resulting in a more stable, predictable environment – an essential factor for the private sector to flourish. In the wake of the entry into force of the Lisbon treaty, where the diverse perspectives of the 27 EU member states have at last found an institutional framework. The success of the EU attests to the advantages of regional integration among like-minded countries, where a combination of cultural proximity and

mutual knowledge facilitated the deepening of the integration process from a free trade area to a single currency and the widening from the original six members through successive enlargements. The same is perhaps true of French-speaking West and central African (so-called CFA) countries, particularly those pegged to the euro, as a driving force of economic policy coordination and integration, the caveat being that the stability of the nominal exchange rate may be accompanied by unstable real effective exchange rates, as analyzed for the CFA countries in ECOWAS by Macedo (1986)². Their long experience with a monetary policy conducted by a strong institution that must preserve its independence vis-à-vis national governments has accustomed these countries to yielding some of their economic policy matters to a regional organization. In comparison to CFA common institutions, those in the Economic Community of West African States (ECOWAS), which includes Cape Verde, and in the Southern African Development Community (SADC), which includes Mozambique, appear incapable of achieving, let alone of searching for, the regional common good.

The idea of producing knowledge from within a cooperative framework is what we mean by mutual knowledge. Mutual knowledge is generally more limited and the data harder to compare outside of the OECD so that cooperation at the regional, sub-regional and international levels may neither produce knowledge of effective policies or institutions nor create conditions for their implementation. In fact, context-adjusted but also widely usable knowledge only results from identifying an appropriate constituency for each set of related problems and challenges³. Reaching the MDGs in 2015, for example, presupposes sustained

² The role of the monetary allocation mechanism enforced by the French Treasury is also emphasized, e.g. p358.

³ Bourguignon et al. (2008) underline the heterogeneity of country outcomes and the difficulty in finding patterns even in fragile states. This heterogeneity is no surprise: to “develop a global partnership for development”, the eighth MDG goal, reflects disappointment with the performance of developing countries which seemed to follow the policy recommendations of the “Washington consensus” during the 1990s. As governance improvements were not commensurate with the challenges of globalization, especially in what concerns financial markets, these

pro-poor economic growth in addition to better governance and more aid, but there are no immediately available recipes on how to bring about a positive interaction between globalization and governance (G&G): In other words, alternatives to both the “one size fit all” and “each case is unique” development ideologies are urgently needed in a context which cannot draw upon existing experiences of institutional cooperation that foster mutual trust and generate mutual knowledge. Under these circumstances, the quest for African development successes remains a policy as well as a research priority, especially acute in the case of SSA. In a nutshell, what is at stake for many African countries is how to ensure that current policy and institutional arrangements in the spheres of trade, finance, debt, investment and technology mutually reinforce each other in support of equitable, rapid and sustainable growth and development.

Against this background, we assess the extent to which Cape Verde and Mozambique may represent SSA development successes in Africa, West and South. Specifically, we seek to identify lessons for successful governance based on meaningful national and regional comparisons of Cape Verde and Mozambique's development experience. These lessons will be drawn from the study of the complementarity of economic policies (trade, competitiveness, financial) and accompanying institutional arrangements. We realize that we are being somewhat ambitious but, in our view, identifying such lessons necessarily entails a broader scope of analysis than is usual.

Our motivation for studying these countries is twofold: first, it is widely recognized, within the development community, that both countries are actively seeking to overcome adverse

countries faced recurrent financial crises which interrupted the long term convergence process.

developmental conditions, either due to geography (Cape Verde is a small island state with little natural resources and a difficult climate) or history (Mozambique fought a protracted civil war following its independence from Portugal in the mid 1970s). Cape Verde, for example, signed a five year contract in 2005 with the Millennium Challenge Corporation even though it was above the income per capita ceiling that determined eligibility. This was largely seen as an incentive for the country to continue its efforts on the development front. As expected, Cape Verde graduated to middle income status in late 2007 and, at the suggestion of Luxemburg and Portugal, also signed a special partnership with the EU. Mozambique, meanwhile, was eligible for the Millennium Challenge Corporation since its inception in 2004 and “remains a successful example of post-conflict transition, with impressive economic growth averaging 8 per cent from 2000 to 2006 and sustained macroeconomic and political stability” according to the 2008 edition, which was launched on 11 May 2009 in Maputo. Second, we seek to contribute towards greater mutual knowledge within the Community of Portuguese-speaking Countries (CPLP) on economic development issues in general, and the MDG, in particular. Indeed, the 2006 Bissau Declaration sees cooperative governance as capable of producing “mutual knowledge” within the CPLP based on the fact that the standards of appropriateness regarding policy and institutional reform may be less responsive to geography than to historical affinities.⁴ In spite of their geographical discontinuity, the five Portuguese-speaking African countries (the three others being Angola, Guinea-Bissau and Sao Tome e Principe) formed a group known as PALOP in 1979, which held ten summits until 1992, when they signed the first Regional Indicative Programme with the EU. With Timor-

⁴ In other words, the effectiveness of mutual control devices such as the African Peer Review Mechanism reflect the extent to which cooperation overcomes collective action barriers and clears the ground for coherent reforms (Kanbur, 2004). The ECOWAS and SADC secretariats in Abuja, Nigeria and Gabarone, Botswana respectively could promote “mutual knowledge” closer to the citizens of the sub region than the Commission for the African Union, or the local offices of global organizations such as the United Nations, the International Monetary Fund and the World Bank. But there have not been enough constituencies for reform in SSA.

Leste joining in 2005, there are now six ACP Portuguese-speaking countries cooperating under the 10th European Development Fund. They signed a Memorandum of Understanding with the European Commission on the eve of the second Europe-Africa summit in late 2007. Future activities, integrated into a multi-country approach, focus on democratic governance as a key determinant for poverty reduction. This Memorandum extended to CPLP, which also includes Portugal and Brazil.

The present research follows from work initiated at the OECD Development Centre along with the report produced jointly with the African Development Bank since 2001⁵. The emphasis on identifying the linkages between cultural, institutional and economic factors that fostered growth and development remains in this paper, organized as follows. The framework provides a context such that the G&G interaction can be positive or negative, depending on the orientation and predictability of economic policies, as well as the accompanying institutional arrangements. Economic success under globalization involves market perceptions regarding outcomes such as trade diversification and narrowing of the income gap with the frontier. Economic success is in turn sustained by good governance and the political and economic freedom citizens and residents enjoy. This framework is presented in Section 2 as the context in which specific G&G interactions are positive. The narrative of long term development in Cape Verde and Mozambique in section 3 identifies successful policy and institutional reform experiences in sub-regional cooperation agreements such as ECOWAS and SADC. Efforts at monitoring the MDGs not only across SSA but also in PALOP complement the context for export diversification, financial reputation and good governance detailed in the annexes.

⁵ The suggestion to analyze PALOP and Timor Leste, initially due to Brazil, can be found in OECD (2003). Especially relevant for this projects are Lourenço and Foy (2003) and (Tibana 2003), summarized in annexes 3

Section 4 estimates the factors that determine successful export diversification and income growth strategies in comparison to the sub-regional averages. Given factor endowments, indicators of good governance have the expected positive effect on the export diversification and the income gap relative to developed countries while economic and political freedom contribute positively to these strategies. Cape Verde and, to a lesser extent, Mozambique also compares favorably to respective sub regional averages in financial reputation, measured as the inverse of exchange market pressure (Macedo et al 2009b). This study of how to create contexts for the implementation cooperation of effective policies allows us to ascertain whether cooperative governance and peer-review mechanisms are capable of sustaining development successes in SSA and in its west and Southern sub regions.

2. How Globalization & Governance interact with Convergence: An Interpretative Framework

Policy and institutional responses must necessarily change as the nature of globalization itself changes. Indeed, different waves of globalization (16th, 19th and 20th-21st centuries) have interacted with different forms of governance responses. G&G interaction is always context-specific, as defined by space (geography) and time (history). In the current wave, the context is captured by convergence, often measure as the gap in per capita income relative to the frontier, and by democracy, often measured in terms of electoral competition and political participation but best understood by its constituent political and economic elements⁶. To

and 4. See also *African Economic Outlook* (2009).

⁶ Przeworski et al. (2000). Garoupa & Tavares (2009) show that higher income increases the survivability of democracy but they label a country as democratic if its governments are designated through elections in which more than one party competes and the winning party is not always the same. The extension of suffrage, for example, would not appear in this dichotomous variable. Yet a negative interaction between democracy and debt default has been found for the period of the classical gold standard. Specifically, Flandreau & Zummer (2004, p.

enhance the quality of the democracy measure, we look at the index of political rights and of civil liberties published by Freedom House and at the indexes of economic freedom published by the Fraser Institute and the Heritage Foundation.

Political rights are associated with free and fair elections for the executive and legislative branches of power, freedom to constitute political parties, freedom of association, independence from political, religion and military authorities, real possibilities of the change of power and other related aspects of the political system. Key elements of civil liberties include freedom of thought, religion, association, free press and respect for the rights of minorities. The concept of economic freedom is more difficult to define as it may relate only to private ownership, prices being determined by market forces, *de jure* and *de facto* entry and exit, efficient rule of law and official economic regulation guaranteeing competition or also include the financial freedom brought about by currency convertibility, stability of money value, central bank independence and deep financial markets. Furthermore, the widely used indexes include low taxes, a small share of government spending in GDP and flexible labor markets, and this appears to some as too extensive a definition of economic freedom.

In earlier work, Macedo (2001) found that trade openness reduced perceived corruption and claimed that this was the way in which globalization improved governance. The result holds for OECD and non-OECD countries, even after correcting for the endogeneity of perceived corruption. Historical control variables (e.g. protestant tradition, *de facto* democracy and

44) find that the extension of suffrage reduces the default probability with elasticity of 0.5 for the whole sample and of 1.3 for capital-poor countries. They note that contemporaries saw democracy and parliaments as a source of greater stability, because they put checks and controls on the sovereign and imply a greater implied ability to tax. This contradicts the widespread view that the repression of democracy facilitated the operation of the pre-1914 international monetary system by making external adjustment easier. Another way of introducing quality considerations is through the concept of democratic capital (Persson and Tabellini 2006).

OECD membership) were also found to be highly significant. In Macedo et al (2007), the two-way interaction between democracy and globalization becomes more sensitive to regional context, and stages of national economic and institutional development over the period 1970-2004 than the results over the entire 1870-2000 period found in Eichengreen and Leblang (2006). The different types of freedom also interact differently with the trade and financial globalization variables. Overall, allowing for the quality of democracy lowers the overall effect of globalization on democracy. One reason for this is the hypothesis that globalization's effects on democracy are mediated by slow-moving cultural values. This would imply that such variables might be accounted for by selecting groups of like-minded countries, like the OECD, for which the effect of globalization on freedoms would be stronger but this would neglect the convergence dimension, more visible on a global scale. The mutual relationship between globalization, governance and economic performance is described in Bonaglia et al. (2009) and Macedo et al. (2007) along the following lines: a nation's resource endowments and its productivity determine how fast it can grow and the level of its economic well-being in terms of income per capita, both in absolute terms and relative to the income frontier. Feedbacks are possible: a richer country growing fast may invest more resources in scientific research and technology development and thus enjoy higher productivity levels than a poorer, slow-growing economy. Through trade, capital flows or migration, globalization can influence the level of endowments available in an economy, or even, through international technology transfers, its productivity. Conversely a country's endowments of natural resources, labor, and capital, as well as its geographic location and efficiency of its production structures may determine how much it trades with the rest of the world in terms of goods, services and assets. Similarly, a country with good governance, namely a democratic state with high-quality institutions, effective corruption-free accountable bureaucracies, and a flourishing civil

society may likely increase the quality, if not the quantity, of its most important endowment: its own people. Once more, cause and effect can be swapped: well-endowed countries may evolve towards democratic forms of government more easily, or, at least, they may afford investing more resources to build well-functioning institutions.

While these interactions have been at the core of economics, this has not been the case of “how G&G interact with convergence”, perhaps because of the interdisciplinary nature of globalization waves and of governance innovation - even when the distance to frontier is not as fundamental as it is for Africa. With respect to the relative strengths of the links between the current wave of globalization, the benchmark measure of freedoms and convergence, the empirical findings of Macedo et al (2007) reveal that political rights and civil liberties had a significant impact in the run-up to the third globalization while feedbacks were somewhat weaker. As mentioned, further work is needed to understand the long-run dynamics and sustainability of this global system, in particular the mechanisms that could enforce or reinforce the expected positive effect of globalization on both convergence and freedoms. The particular G&G interaction which involves democracy reflects historical, geographical, social, cultural, institutional and economic factors and the method employed focuses on the economic aspect of this relationship. A complementary explanation of the interaction can be based on the manner in which diversity, be it socio-cultural or economic is addressed by a given society⁷. The focus on the management of diversity as a determinant of this interaction is simply one such avenue that warrants further investigation. The Portuguese case may be

⁷ Indeed, one of the constants of human organization is the “absolute certainty that man will never be common, he will always be different, he will always give rise to diversity. And society, by managing this diversity, will manage prosperity and the creation of wealth” (Borges de Macedo 1996, p.194). The same holds true, of course, for the case of political diversity and whether peace or conflict ensues. The distinct processes of colonization of the Americas is chosen to illustrate the importance of diversity and how it is managed as being a crucial determinant of the interaction between economic and political organization in Macedo et al (2007b).

helpful because the liberal revolution of the 1820s and its aftermath created the presumption that political and financial freedoms are incompatible instead of complementary. As this may have influenced the democratic transition of Brazil and some PALOP, taking it into account may allow us to better understand countries like Cape Verde and Mozambique⁸.

3. Comparative description of Cape Verde and Mozambique

3.1. World regions and the exclusion of SSA

Three “regions” (North America, EU, ASEAN + China, Korea, Japan) account for ¼ each of world GDP. The rest of the world includes over ½ of world population, with other significant actors (Brazil, Russia, India) and salient regions (Africa, Middle East). Taking a global view should foster governance innovation, but dominant players and associated free rider problems prevent cooperation among abstract regions where there is no peer review and around 70 “fragile states”, most of which located in Africa. In the rest of the world, Africa plus South America combined doubled their share of world GDP from 1820 to 1950. The share remained constant since at around 10% with North America and EU roughly equal to Asia (including Japan, Russia and Turkey), shares that are comparable to those prevailing in 1820. In 1950, however, North America and EU accounted for 60% and Asia for 30%. In terms of population Africa and South America have more than doubled their combined world share from 10% in 1820 to 15% in 1950 to 22% in 2003 while Asia has dropped from ¾ to ½ and then rose again to 2/3. In terms of GDP per capita, the relative shares are ½ for Africa and South America and over 2/3 for Asia.

⁸ This is acknowledged by Maddison (2001, p. 71-75). Amaral (2009) revisits the Portuguese transition to democracy during the second wave of globalization. The inspiration for Macedo and Pereira (2007) was to study the diversity of Portugal's and Portuguese speaking countries' responses to globalization.

The data drawn from Maddison (2007) illustrates the lack of knowledge about SSA as estimates of GDP for the five North African countries (Algeria, Egypt, Libya, Morocco, Tunisia) begin in year 1, Ghana and South Africa in 1820 and the rest in 1950. This “millennial” perspective on world regions helps to avoid the pitfalls of a purely geographic approach: regions may be historical rather than geographical and interaction during the first wave of globalization (15th century) and even the second (19th century) did not involve nearly as many players as the current one. Yet the complementarity between globalization and regional integration and the development paradigm based on mutual accountability contained in the 2002 Monterrey declaration both suggest weak G&G interaction in SSA.

The absence of regular kept the SSA share of world GDP at or under 4% from 1870 until 1940 and then again since 1950, when estimates for 34 new countries become available. The share of SSA rose from around 20% until 34% in 1913 and more than doubled to ¾ in 1950. Thereafter the SSA share of Africa GDP declines by more than 10 pp but West (=ECOWAS) and South (=SADC) shares in SSA remain at 40% and 30% respectively. This relative stability contrasts with a decline of about 20 percentage points of world GDP per capita, from 42% in 1950 to 24% in 2003. The corresponding figure for SSA is 18%, forecast by IMF to rise to 21% in 2013.

Given Africa’s diversity, assessing development successes requires comparisons among partners in sub regional organizations which include members with different cultural, historical and strategic affinities. ECOWAS was established in 1975 and includes Benin, Burkina Faso, Cape Verde, Côte d'Ivoire, Gambia, Ghana, Guinea, Guinea-Bissau, Mali, Niger, Nigeria, Senegal, Sierra Leone and Togo. SADC was established in 1980 and includes

Angola, Botswana, Congo Democratic Republic, Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe. The experience of Cape Verde and Mozambique is systematically compared to the ECOWAS and SADC average but also to SSA and PALOP⁹. Emphasis is given to export diversification, measured by the number equivalent Herfindahl index, financial reputation measured by the inverse of exchange market pressure and good governance, measured by World Bank indicators.

A snapshot for each member country of ECOWAS and SADC of eight indicators used in the empirical analysis (Income Gap to Frontier, Country and U.S. GDP per capita, constant 2000 US\$; Number Equivalent Index at 1,2,3,4,5 digit SITC; Inflation in consumer prices; Government Surplus/Deficit % GDP; Degree of openness, Exports plus Import % GDP; Political Freedom; Economic Freedom; Life expectancy at birth) is in Figures 4.1 a and b respectively. Figures 4.2 and 4.3 show the relation between Income Gap and Number Equivalent in terms of the raw data as well as country means for ECOWAS and SADC, while Figures 4.7 show the time series for the countries and the sub regional averages. Figures 4.4 in turn relate Income Gap and Government Deficit and Figures 4.5 relate Economic and Political Freedom. Account is taken of the different performances by defining high and low regimes in terms of the variables of interest especially growth in GDP per capita (Figures 4.6). In the description that follows, the emphasis is given to Foreign Trade and Economic Growth in the next subsection, followed by Macroeconomic Policy and Financial Reputation (subsection 3.3) and MDGs and Governance Indicators (subsection 3.4).

3.2. Foreign Trade and Economic Growth

⁹ The ranking CV, STP, MZ, GB, ANG applies to export diversification, political and economic freedom as well as corruption perception computed in the *African Economic Outlook 2009*. The last two are shown in Tables 3.4 and 3.5 below.

The average annual change in the number equivalent for Cape Verde and ECOWAS, for 5 year periods, shows that diversification has increased significantly relative to the group. In the period from 1976 to 2005, a new good was being exported approximately every five and a half years ($1/0.18=5.55$). In Mozambique there was significant diversification up to the late seventies while SADC was actually concentrating. However, from the eighties on, concentration was large, especially in the early nineties and between 2001 and 2005. During the latter period, on average, every two years a product stopped being exported ($1/0.48$). This is detailed in annex 1¹⁰.

Tourism is absent from the OECD database used so far and Cape Verde is classified by the IMF as a tourism-based economy as its travel exports have exceeded 10% of GDP for at least one year during 1998-2007. Indeed, since 2003 service exports and FDI (especially tourism-related FDI) outpaced remittances, an historically significant source of foreign exchange, and aid transfers. Tourism is undoubtedly an important sector of economic activity due to Cape Verde's political stability, good geographical location and weather, and also Cape Verde's currency peg to the Euro. As tourism is highly procyclical, an excessive reliance on it increases output volatility unless exports of goods and services are sufficiently diversified. Following increasing trade and financial integration into the world economy, Cape Verde's business cycles have become more synchronized with developed economies but structural problems persist. The labor market is relatively rigid and some administered prices still exist (e.g., in the energy sector), which makes that adjustment to external shocks more difficult. Regarding the sources of foreign financing, emigrant's remittances remain quite important for

¹⁰ Additional results there as follows. Cape Verde's degree of export sophistication in relative to ECOWAS is close to 6000 as opposed to 5000, even though in the early nineties it decreases to 3000 and 2000 respectively. Mozambique with a lower sophistication than SADC during the nineties but its sophistication increased sharply

Cape Verde's economy. In 2006, they totaled 12% of GDP and their low volatility has allowed for consumption-smoothing in response to external shocks. However, remittances have become more procyclical in recent years, e.g. the correlation between (detrended) GDP and remittances was around 65% for the period 1980-2006. This fact may be associated with investment-driven flows rather than traditional consumption-smoothing behavior. Since financial flows are far more volatile and less prone to act as a buffer in times of crisis, this is another challenge to Cape Verde: as Lourenço and Foy (2003) note, reforms are a necessary but not sufficient condition for success. Adequate implementation and control is also required to ensure that increased foreign direct investment translates into higher growth and employment.

Notwithstanding the progress achieved thus far, Mozambique also faces a number of challenges. As it depends on foreign aid, revenue and administration reform as well as a stronger fiscal regime towards mineral and oil resources will be required for the government to enforce an “exit strategy” which enables it to raise revenue for its own, to finance at least current expenditure as soon as the MDGs are achieved (Lledó et al., 2007). While it is true that Mozambique has a strong export record when one considers its share of world exports over the last few years, this achievement has been primarily due to specific mega-projects, most noticeably in the aluminum sector. Moreover, its trade pattern is sometimes the result of protectionist policies, such as tax exemptions and qualification as export-processing zones that allow companies to import goods duty free and benefit from tax incentives. Two examples are the sugar and cashew industries. In the late 1990's, an import tax on sugar led to increased domestic sugar production and an export tax on raw cashew nuts penalized small

since 2000 overcoming SADC's.

exporters while encouraging small and medium-sized cashew processing. In this case, the pattern of specialization is clearly linked not only to comparative advantage but also to trade policy. It should be noted, however, that Mozambique's trade regime is not too restrictive. In 2006, the average tariff was in line with the rest of SADC, there were no significant nontariff barriers according to the IMF and the process of tariff disarmament will likely continue. As a result, the maximum tariff has declined from 35% in 1999 to 20% in 2006. Mozambique's business environment is still relatively weak. The "Ease of Doing Business" indicators for 2006 suggest that custom procedures, business registration and contract enforcement still perform poorly against other SADC members. Mozambique was one of the countries that benefited most from the HIPC and MDRI. Debt relief coupled with a cautious macroeconomic stance has allowed for increased spending, especially in the health and education sectors. However, long-term fiscal sustainability hinges crucially on the widening of the tax base and on economic growth underpinned by high-quality structural investments.

Figures 3.1 a and b show the comparative evolution of GDP per capita in 1990 international dollars from 1950 until 2006 for Cape Verde and Mozambique respectively in comparison to the sub regional averages. The overall pattern of is that of PALOP compared to SSA, whereby the latter are more volatile in up and downswings (Figure 3.2). Comparing GDP growth rates since 1950 shows a growth differential of almost 2% for Cape Verde relative to ECOWAS whereas Mozambique growth is slightly below that of SADC. The decade averages show the greater volatility of Mozambique's output with two decades of negative growth, whereas in Cape Verde there was a negative differential of 4 pp in the 1970s. While this difference has roots in the colonial period, the pattern was reinforced after independence. After achieving independence in 1975, successive Cape Verde governments played a prominent role in the

agricultural, industry and service sectors through their direct interventions and control. As consequence, there was limited scope for increases in competitiveness and foreign direct investment was also discouraged. As of 1988, however, a wide-ranging program of reforms aimed at trade liberalization and privatization reduced the government's role to essentially that of building badly needed infrastructure. More recent governments have continued these and other related reforms, including those of relevance to financial and exchange markets. Most of the recent increased and sustained growth is attributable to the growth in the service sector, namely transports, hotel and restaurants and communications, and also due to increased spending on education and improved governance. Indeed, the importance of the service sector, largely in tourism, is evident as early as 1980. Its continued success depends on further improving required infrastructure, namely good communications and a liberalized air transport market (Lourenço and Foy, 2003).

On the other hand, Mozambique's economic growth was stunted by thirteen years of civil war that followed its independence from Portugal in 1975, which is estimated to have killed up to a million people. It is also affected by the Marxist-socialist ideology espoused by the governments in the immediate post-independence period. Prior to independence, there was significant public investment in infrastructure and also expenditures in health and education during the period 1960-73, which contributed strongly to Mozambique's growth. In agricultural sector, it was generally true that large private farms performed better than smaller ones, and therefore accounted for the bulk of agricultural output. However, the post-independence economy was very much government-controlled. By 1984, for example, more than half of all registered firms were state-owned. Not unexpectedly, the development of a market-economy was severely hampered, which impacted negatively on growth. During the

1980's, Mozambique began gradually moving away from a centrally planned economy, e.g. price controls on vegetables and fruits were removed. Another example is the enactment of 1987 Economic Rehabilitation Program, which led to a strong shift toward market-based economic policies and the pursuit of structural reforms. These included the stabilization of the Mozambican currency's exchange rate, trade liberalization, extensive privatizations and tariff and financial sector reforms. However, it was only after the consolidation of peace that any significant improvements had the opportunity to occur. Following the signing of the 1992 Rome treaty, a new constitution was adopted that allowed for democratic elections and progress further toward a market-economy. Over the past decade, Mozambique has again become one of the attractive economies in the sub region.

3.3. Macroeconomic Policy and Financial Reputation

Cape Verde's inflation rate has been low as its currency is pegged to the Euro. Macedo and Pereira (2006) and Macedo et al. (2009) find Cape Verde's currency board to be credible, given the substantial reduction in the number of exchange market pressure crisis episodes occurring after the peg was adopted, amongst other factors. In 2002, deficit financing by the central banking was also formally prohibited. In practice, the government has not needed to rely on this type of financing due to the receipt of donor-aid and the sale of treasury bonds with medium-term maturities. Fiscal policy has also been prudent with a medium-term fiscal strategy for 2008-2010 approved by the IMF. Fiscal reforms were accompanied by an increase in tax effort, particularly of income tax, as corporate tax rates are still relatively low. Together, this environment of fiscal responsibility has allowed Debt Sustainability Analysis to classify Cape Verde's debt risk as low. As for its external position, Cape Verde continues to depend much on transfers, mostly attributable to the remittances of its emigrant diaspora. However, it

is likely that second and third generation emigrants from Cape Verde will be less inclined to send less remittances and will, instead, only invest in Cape Verde when it is profitable to do so. Moreover, the decreasing role of transfers and the increasing role of portfolio investment and FDI erodes remittances' role as a buffer for households. The government will have to take cognizance of this fact when designing and implementing its medium-term development strategy.

Mozambique's inflation rate has been under control for some time now and it now ranks amongst the lowest in the SADC. This relative stability in inflation has been accompanied from the 1990's onward by a steady depreciation of the Mozambican metical's exchange rate against the U.S. dollar, which is in line with other depreciation rates of SADC currencies. In terms of monetary policy, the Bank of Mozambique has undertaken several important measures recently, namely daily liquidity forecasting and sterilization of changes in the monetary base. In 2007 inflation rose, but a tight monetary policy will probably keep inflation under control in the near future. Turning to fiscal matters, it seems that budget equilibrium is not a goal for the Mozambican policymakers at present. The budget deficit is expected to increase as revenues from donors and taxes are used to invest in health, education, agriculture and infrastructure. Moreover, the tax effort is still very low, although it has increased recently. However, it is important for government to increase taxes on big projects and to create procedures that increase compliance in order to widen the future tax base. Regarding its external position, Mozambique has experienced trade deficits and negative factor incomes balances, which have been partially compensated by transfers (with the exception of 2006, where transfers were in excess of the shortfalls). The trade balance improved up till 2006 due to high aluminum prices and export growth of cashew nuts, sugar, prawns and tobacco.

However, the increase in the oil price and a decrease in traditional exports in 2007 deteriorated the trade balance. It is important to note that the financing of the current account deficit (which was 22% of GDP in 1999) was made easier by the debt relief programs made available to Mozambique throughout period under consideration. Indeed, it has been said that much of Mozambique's current development would never have occurred had debt not been relieved in the early 2000's.

As mentioned in Macedo et al. (2009b) and expanded in annex 2, financial reputation is defined as low exchange market pressure (EMP) with low volatility. In particular, real exchange rate depreciation improves financial reputation in Cape Verde while doing the opposite in Benin, where it increases EMP mean and volatility. In SADC, the pattern is harder to discern but real exchange rate depreciation also improves financial reputation in Mozambique. Conditional volatility and mean EMP, reported in Figures 3.3 and 3.4 for ECOWAS and SADC, strengthen conclusions from the unconditional volatility and mean EMP. In particular, the results bring Mozambique, a floater, closer to Seychelles, a fixer¹¹.

3.4. Millennium Development Goals and Governance Indicators

The information on MDGs is drawn from a report on MDGs in CPLP prepared at the request of the Guinean presidency (Macedo et al 2007) and from the 2009 *African Economic Outlook*: data before the crisis show the percentage of satisfactory outcomes increasing from 26% to 31%. Overall, we find that Cape Verde is better placed than Mozambique, which reflects the fact that the latter is departing from a very low point, but it is progressing very fast at most of the MDGs.

¹¹ Annex 2 analyzes EMP in PALOP, ECOWAS and SADC both in a descriptive sense and in a model-dependent framework, showing that fixers behave better than floaters.

(Insert Tables 3.1 and 3.2 here)

On the eradication of poverty, Cape Verde has one of the lowest shares of the poorest quintile in national consumption. Using the data available, we see that it is slightly worse than the average ECOWAS member. Angel-Urdinola and Wodon (2007) argue that relative poverty increased between the 1988/89 and 2001 surveys, based on the increase in the Gini coefficient from 50.2% to 53.83%), while absolute poverty measures decreased dramatically. Mozambique, meanwhile, has a slightly larger share (5.4%) of consumption of poor people when compared to the SADC average. Although the US has a comparable figure, its definition of poverty is a relative and not an absolute one. However, IMF (2008) considers it likely that this goal will be attained by 2015 in view of Mozambique's recent evolution.

On net enrolment in primary education in Cape Verde has actually decreased slightly. However, the enrolment level is very high even by the developed world's standards. Notably, Cape Verde is well ahead its ECOWAS partners, which reflects its focus on education and the quality thereof. For Mozambique, the net enrolment in primary education has increased significantly since the 1990's, especially during 2000-06. Indeed, Mozambique has improved remarkably when compared to most SADC countries but stills lags behind them. The same can be said for its level of literacy. On gender parity, Cape Verde is better placed than its ECOWAS partners but some of them are now catching-up fast. Gender parity in Mozambique is one of the poorest in SADC but, at the same time, it registers a sustained and strong improvement.

With respect to child mortality, Cape Verde's is by far the lowest in ECOWAS but still far short of the level in developed countries. Even so, it has decreased significantly. On this score, Mozambique is improving rapidly, as its child mortality rate has decreased to 153.67 per thousand, which is much better than the SADC average. The IMF (2008) foresees that this MDG will probably be reached by 2015. For maternal health, for which there is only one observation, Cape Verde is the best in ECOWAS. Mozambique's maternal mortality rate was below the SADC average in 2005, which is in line with the improvement in child mortality and in public health as a whole.

On the incidence, prevalence and death rates associated with tuberculosis are much lower in Cape Verde than for ECOWAS. There is no data on HIV prevalence in Cape Verde as far as we are aware. The prevalence and death rate of tuberculosis grew more in Mozambique than in SADC members while HIV/AIDS statistics show a worrying increase in infection rates among young people.

The goal of sustainable development is often proxied by the proportion of the population having access to safe drinking water source. It is much higher in Cape Verde than in ECOWAS. Similarly, the proportion of the urban population is also higher in Cape Verde but a significant catching-up is noticeable in ECOWAS member states. In Mozambique, the proportion of population having access to improved sanitation facilities has increased from 22% to 31 % between 1995 and 2006: it lags behind other SADC partners but is quickly narrowing the gap. The same can be said of the proportion of the population living in slums, which has fallen drastically since 2001 (whereas in the SADC partners the reduction has been modest). The weak spot of this MDG lies in the water quality since the improvement in the

proportion of population having access to an improved drinking water source has been negligible while the proportion of the urban population has actually decreased from 83% to 71% when comparing 1995 to 2006.

The global partnership for development is often illustrated by debt service as a percentage of exports of goods and services. It has been historically lower in Cape Verde when compared to ECOWAS and has decreased over time, but ECOWAS decreased more markedly when looking at the year-by-year numbers. Mozambique's debt service has fallen markedly and the period of high growth coincides with that of the donor community's relief of debt.

(Insert Tables 3.3- 3.5 here)

The report on MDGs in CPLP (Macedo et al 2007) includes the following six governance indicators from the World Bank Institute: freedom and accountability (FREE), stability and absence of violence (STAB), government efficiency (EF GV), quality of regulation (Q REG), quality of justice (JUST) and control of corruption (CORR). Good governance has been one of the main features of Cape Verde's development. Rule of law and accountability stem from the fact that democracy is well established and that free elections take place regularly with the results not being disputed. The only aspect that fares worse is regulatory quality but this indicator still fares better than most ECOWAS member states. Education is a major concern for Cape Verde governments: between 1970 and 1990, the number of children leaving school with secondary education increased dramatically. In 1990, half of the children in rural areas attended secondary school and 60% of girls received secondary education in urban areas (see Goujon and Wils, 1996). The literacy rate in the people between 15 and 24 years old is the highest in all ECOWAS. With respect to Mozambique, no significant evolution is noticeable between 1996 and 2006 for most indicators, and then it improves gradually. The exception is

the indicator of political stability and the absence of violence/terrorism, which has improved markedly.

(Insert Tables 3.6 - 3.10 here)

There are 28 indicators for which both Cape Verde and Mozambique had at least 10 answers, in the 2006 and 2007 World Bank Enterprise Surveys are reported in Tables 3.6 to 3.10. The indicators for regional groupings and SSA are simple averages of the countries, some of which are missing (2 out of 15 from ECOWAS and SADC, 12 in SSA). Relative to the average of their comparator countries (in parentheses), then Cape Verde has more developed financial markets, greater macroeconomic stability, less corruption and a state where rule of law is more grounded than ECOWAS, PALOP, SSA but less export-oriented firms, less technology licensed to foreigners, higher taxes and a heavier regulatory framework than the benchmarks. Mozambique has better infrastructures (water, electricity, internet) and less corruption than SADC, PALOP, SSA but less developed financial markets, a state where rule of law is less grounded, less export-oriented firms and less technology licensed to foreigners than the benchmarks.

4. Empirical Analysis

In this section, we study 2-way relationship between diversification and convergence motivated by the insights provided by our interpretative framework and those of relevant trade diversification literature. In particular, the empirical finding that economic development, measured by per capita income, entails more diversification. The observation is that as economies become more diversified as incomes increase before reaching a turning point, which Imbs and Wacziarg (2003) estimate to be around US\$ 9000 per capita, beyond which

they before less diversified. In other words, development occurs when a country learns how to do new things and focus on those that it already does well, such as producing new goods, choosing promising export markets, upgrading product quality and moving into services exports. We note, in passing, that another strand of literature argues that diversification should focus on exporting more sophisticated products as these entail higher productivity levels conducive to higher growth levels (e.g. Hausmann et al, 2007). In this case, a country becomes what it exports, i.e. countries converge to the level of income implied by their exports.¹² The common point in both approaches, however, is that product development is undoubtedly an important engine of growth for developing countries.

With this in mind, in this section we seek to identify macro-level policy and institutional combinations underpinning successful export diversification and economic convergence in ECOWAS and SADC. Just as important, we also expect to establish context-based objective metrics that will subsequently allows us to better assess the relative performance of Cape Verde (CPV) and Mozambique (MOZ) on both counts in conjunction with evidence of a case-study nature. This indirect approach to study trade-related development success in these two countries is unavoidable as the severe lack of data prevents us from analysing them empirically. Our study covers the period 1960-2004 and uses annual data obtained from various sources (see appendix 1 for full details, including summary statistics, on variables used in our estimations).

(Insert Figures 4.1a, b - 4.5 a, b here)

Before proceeding to the econometric analysis, we draw the reader's attention to the graphs that allow for a rapid cross-country comparison of key variables used in our analysis for both ECOWAS and SADC (Figure 4.1a, b). We also depict the relation between diversification and

¹² We hope to explore the issue of export sophistication in future work, especially once data issues are resolved.

convergence for CPV and MOZ over time and also with respect to their respective regional averages (Figure 4.2a, b). The insights obtained from these graph, as well those from the LOWESS plots (Figures 4.3a, b - 4.5 a, b) will help us to better understand and interpret our results, especially with respect to variables identified as being highly significant in our econometric analysis.¹³

The first LOWESS plot clearly depicts the expected (negative) relation between diversification and convergence when using the country means, i.e. mean *ygap* and mean *neq5* for each country (Figure 4.3a, b). When all observations are taken into account, the same is true for SADC but there is no discernible relation between the two variables for ECOWAS. It is also clear that the strong negative relation exhibited by SADC is largely attributable to South Africa's high level of diversification. Once we exclude South Africa from the sample, we observe that the relation is now ambiguous and not dissimilar to that of ECOWAS. Regarding government deficits, we observe that lower budget deficits are associated with increased convergence, especially when they are less than 6% of GDP for ECOWAS and around 8% for SADC (Figure 4.4a, b). As for the relation between political and economic freedoms, it is clearly positive in both regions but more so for SADC based on the visual inspection of the LOWESS plot obtained using all observations (Figure 4.5a, b). When one uses country averages instead, we see that there is an unequivocal positive relation between freedoms in SADC while it is somewhat "u-shaped" in ECOWAS, which possibly reflects the fact that the region aggregates countries with dissimilar characteristics on this score.

¹³ LOWESS, or locally weighted scatter plot smoothing, is a method that fits simple regression models to localized subsets of the data. The objective is to build up a function that describes, point by point, the deterministic part of the data's variability. For further details, see Cleveland's (1979) seminal contribution and also subsequent developments by Cleveland and Devlin (1988). Note that we only present those LOWESS plots in which there is clear and interpretable relationship between the variables under consideration. The others are available from the authors upon request.

Turning to our empirical analysis, we adopt a system equation approach mainly because we believe that it is better suited to model interdependence between variables. We also seek to address the problem of endogeneity due to simultaneity bias and so make use of the standard Three-Stage Least Square method (3SLS). This method incorporates uses all the information provided by the exogenous right-hand-side (RHS) variables to instrument the endogenous (LHS) left-hand-side variables. As such, it avoids the potential pitfall of having to find “good” instruments within a single equation context. Notwithstanding this advantage, we recognize that 3SLS may be more sensitive to the existence of spurious correlations or multi-collinearities among the regressors in one equation, thereby "contaminating" the remaining equations. In our sample, this does not seem to be an issue, however. In order to assess the robustness our method, we also estimated the diversification-convergence relation using alternative estimation techniques, namely Ordinary Least Squares (OLS) and Two-Stage Least Square (2SLS). In general, the results obtained are broadly consistent with those presented below (see appendix 2).

As for our variables, we measure the distance of a country's GDP per capita (ypc_{it}) compared to that of the United States ($ypc_{USA,t}$) in order to capture economic convergence. Specifically, the income gap is calculated as $ygap_{it} = 1 - (ypc_{it} / ypc_{USA,t})$, which implies that the income gap narrows as ypc_{it} increases. We measure export diversification using the number equivalent index ($neq5_{it}$), which is calculated as the inverse of the Herfindahl Index (5-digits, SITC rev.2). Together with additional control variables, we expect these two variables to be a meaningful characterization of each country's diversification-convergence, which will be

affected by the interaction between policy and institutional variables. Accordingly, we specify the following two-equation simultaneous system for our analysis:

$$(1) \text{ } ygap_{it} = \alpha_1.neq5_{it} + \delta_1.(Policy_{it}) + \beta_1.(Institutions_{it}) + \gamma_1.Z_{1it} + \varepsilon_{1 \cdot it}$$

$$(2) \text{ } neq5_{it} = \alpha_2.ygap_{it} + \delta_2.(Policy_{it}) + \beta_2.(Institutions_{it}) + \gamma_2.Z_{2it} + \varepsilon_{2 \cdot it}$$

where $i = 1, \dots, N$ countries and $t = 1960-2004$. For each country, $Policy_{it}$ and $Institutions_{it}$ respectively represent economic policy variables (inflation, government deficit and degree of openness) and institutional ones (political and economic freedom, age of constitution, age of democracy, number of prior transitions to dictatorship, amongst others). $\{Z_i\}$ denotes a set of control variables (see appendix 1) where the economic variables (such as capital and labour endowments) are used together with geographic variables (such as distance or landlockedness).¹⁴

Regarding our estimation strategy, we first estimate the log-log equivalent of equations (1) and (2) for each region in order to identify the determinants of diversification and convergence at the regional level. Then, we re-estimate these two equations for regional sub-samples that capture two different diversification-convergence scenarios. The first sub-sample, denoted as the HIGH-regime, comprises countries that simultaneously exhibit high diversification and high convergence while the second, the LOW-regime, comprises those that exhibit the opposite combination. We expect that this strategy will allow us to highlight differences and commonalities in performance across regimes and regions.

¹⁴ Our initial estimation process revealed that the inclusion of certain key variables of interest, such as the real effective exchange rate and measures of exchange market pressure, dramatically reduced the number of observations that were available to be used in our models. Regrettably, we subsequently dropped these variables from our analysis but hope to incorporate them again in future work entailing larger samples.

We identify the criteria used to divide the sample from the visual inspection of the partial relation between income gap and number equivalent index averages (see Figures 4.3a, b, bottom panel). We define HIGH-regime as those observations satisfying the condition $\{ygap < 0.945 \ \& \ neq5 > 4.5\}$ and LOW-regime as those where $\{ygap \geq 0.945 \ \& \ neq5 \leq 4.5\}$ in the case of ECOWAS. In effect, we are isolating the upper-left and bottom-right quadrants for further analysis. Moreover, we identify Senegal (SEN) as potential regional benchmark with which to compare CPV given its high intra-regional diversification-convergence combination. We adopt the same conditions for SADC to facilitate inter-regional comparisons and identify Mauritius (MUS) and South Africa (ZAF) as potential benchmarks. Our estimation results are given in Table 1a, b which includes both the full sample and two sub-samples for ease of comparison.

(Insert Table 4.1 a, b here)

With respect to ECOWAS, we find a 2-way relationship between convergence and diversification but only under the HIGH-regime. Moreover, the estimated coefficient of the impact of diversification on convergence is relatively and highly significant (-0.646 at 1% level). Under the LOW-regime, the relation is only 1-way as more convergence always increases diversification but not the other way round. For the region as whole, diversification increases with more convergence but more diversification actually leads to *less* convergence. This result is unexpected but plausible given the ambiguous relationship between these two variables in ECOWAS, as depicted in Figure 4.3a (top panel), and non-linearities that characterise many of the partial relations between variables. The impact of convergence on diversification is also weaker when compared to the HIGH-regime as the estimated coefficient is about half as large (-0.398 *vs.* -0.751). Together, these results appear to indicate

that a critical level of diversification is needed before one observes a 2-way relationship, *ceteris paribus*.

For SADC, the two-way relationship between convergence and diversification occurs under the HIGH-regime and, significantly, also for the full sample. These finding contrasts with the one obtained for ECOWAS, where only the HIGH-regime exhibited such behaviour. It is probably due to the influence that highly diversified countries such as South Africa and, perhaps to a lesser extent, Mauritius, exert on the region.¹⁵ It may also be due to the fact that SADC is almost 70% more diversified than ECOWAS (6.47 vs 3.83 mean *neq5*). In contrast, the two-way relation is *positive* under the LOW-regime: more diversification leads to *less* convergence and less convergence leads to more diversification. This result implies that SADC countries experiencing low levels of diversification may well need to specialize in order to ensure more convergence. This could be the rationale for MOZ's move towards lower diversification, albeit accompanied by higher GDP per capita growth rates, as discussed below.

(Insert Figure 4.6a, b here)

In order to better interpret our empirical findings, as well as to highlight possible differences and commonalities in performance, we also look at how key model variables differ across HIGH and LOW regimes for each country (see Figure 4.6a, b). Note that we use each country's of GDP per capita growth rate in lieu of its rate of convergence to the income frontier as the latter measure would also reflect changes in the United States' GDP per capita. Interestingly, almost all of the highly diversified countries in ECOWAS register *negative* GDP

¹⁵ Indeed, our initial OLS and 2SLS scoping estimations indicated that the determinants of diversification and convergence are broadly similar for ECOWAS and SADC when South Africa is excluded from the latter sample. These results are available from the authors upon request.

per capita growth rates with the exception of CPV. Indeed, it is striking that CPV exhibits not only the highest GDP per capita growth rate in ECOWAS but also one that is fairly consistent across both regimes. This finding accords with our findings in section 3 and is also reflected in our estimates, as the CPV dummy contributes towards more convergence under the full sample. Moreover, its effect for the CPV dummy is almost on par as that of the benchmark (SEN). Note also that while CPV is not as diversified as SEN, it has increased its number equivalent appreciably between regimes as a result of its positive diversification trend over time.

For SADC, GDP per capita growth rates are positive under the HIGH-regime with the exception of Madagascar (MDG), MOZ and Zimbabwe (ZWE). In the case of MOZ, however, the move towards less diversification is accompanied by positive GDP per capita growth, which appears to be a notable reversal of fortunes. Indeed, MOZ's growth under the LOW-regime compares very favourably with that of MUS, which is highly diversified and so has no observations falling in the LOW-regime sub sample (see Figure 4.6b).

Turning to the other policy variables, we find that more inflation leads to more convergence under the full-sample and LOW-regime. In the case of the latter, more inflation also leads to diversification as does a higher budget deficit. This result could mean that increased diversification is associated with less macroeconomic stability but this intuition needs to be confirmed. For the HIGH-regime, we find no relation between inflation and diversification while increased budget deficits lead to *less* diversification and have no effect on convergence. A greater degree of openness leads to less diversification and more convergence under this regime and has no impact whatsoever on the others. Our reading of Figure 4.6a reinforces these findings: inflation is generally lower under the HIGH-regime for countries experiencing both regimes (with the exception of CIV) while government deficits are higher but only

moderately so in most cases and always less than 10% of GDP. For CPV, the result of government deficit consolidation as diversification increased is very clear as is the dramatic lowering of its inflation rate. Diversification coupled with convergence also appears to go hand in hand with an average degree of openness in the range of 60-80% of GDP based on CIV, CPV and SEN's performance on this score.

The results obtained for policy variables in SADC differ from those in ECOWAS when compared on a sample by sample basis. We find that more inflation leads to *less* convergence and *less* diversification under the LOW-regime, as does greater openness. Greater openness is also associated with *less* diversification in the full sample. Increased government deficits, lead to more convergence and *less* diversification for the same sample but increase diversification under the HIGH-regime. Our reading of Figure 4.6b is that more inflation, larger budget deficits and being less open are a greater concern for countries under the LOW-regime. Regarding MOZ, the shift towards less diversification is accompanied by lower inflation but also higher deficits and it appears that there is scope for it to increase its degree of openness. With the exception of the sole effect mentioned above, we note that the effect of policy variables is not as pronounced under the HIGH-regime as in the others, which we take to be a sign of policy credibility.

As for the institutional variables, convergence increases as political and economic freedom increases in ECOWAS. Also, there is more convergence as the age of democracy increases, and this holds true for the LOW-regime. However, an increased number of democracies in the system unexpectedly reduces convergence. Under the HIGH-regime, diversification increases with more political and more economic freedom. In the other two cases, diversification is associated with more economic freedom only. Indeed, we observe that the effect of economic freedom is pervasive across all samples and its effect is largest precisely under the HIGH-

regime. In the full sample, being an older democracy also leads to less diversification as do a larger number of prior transitions to dictatorship in the LOW-regime. There is also more convergence under an English legal tradition. While these results are interesting, they clearly need to be further explored.¹⁶

For now, we take away the insight that a positive relation must exist between economic and political freedoms, which may have to exceed some critical threshold, in order for there to be an environment conducive to convergence (full sample). In addition, economic freedom may be a necessary, but not sufficient condition, to underpin successful diversification in ECOWAS. The insight applies to SADC: an increase in both political *and* economic freedoms increases convergence in both the LOW and HIGH regimes. This does not happen in the full sample, possibly because of a composition effect (we have the combined effect of two opposing effects associated with more economic freedom, which leads to more diversification under the LOW-sample and less under the HIGH). Moreover, an increase in both freedoms increases diversification under the LOW-regime but has the opposite effect under the HIGH. Here again, the full sample exhibits mixed results.

To finalize, we note that most of our control variables display the expected signs, even though this is not the main focus of our analysis. For example, more capital and more oil both lead to more convergence while landlockedness has the opposite effect in ECOWAS. Others, such as the total labour force and population density, have unexpected signs, which need to further explore in future work.

¹⁶ This task requires a better understanding of how freedoms interact with one another and how they relate to alternative legal, political and constitutional arrangements, a task initiated in Macedo et al (2007a).

4. Conclusions

The present research seeks to identify whether the interaction between globalization and governance (G&G) was positive in Cape Verde and Mozambique. Such interaction hinges on linkages between cultural, institutional and economic factors which in turn depend on the orientation and predictability of economic policies. Economic success under globalization is sustained by good governance and the political and economic freedom citizens and residents enjoy. It also involves market perceptions regarding outcomes such as trade diversification and narrowing of the income gap with the frontier. The narrative of long term development in Cape Verde and Mozambique identified successful policy and institutional reform experiences in sub-regional cooperation agreements such as ECOWAS and SADC. Efforts at monitoring the MDGs not only across SSA but also in PALOP complement the context for export diversification, financial reputation and good governance (as detailed in four annexes available upon request).

To identify macro-level policy and institutional combinations underpinning successful export diversification and economic convergence in ECOWAS and SADC, the empirical analysis establishes context-based objective metrics that assess the relative performance of Cape Verde and Mozambique in conjunction with evidence of a case-study nature. Given the severe lack of data over the period 1960-2004, this indirect approach to study trade-related development success in these two countries is unavoidable. We apply Three-Stage Least Squares and other estimation techniques, with broadly consistent results, to two main variables: the distance of a country's GDP per capita compared to that of the United States in order to capture economic convergence (ygap) and the inverse of the Herfindahl Index (neq5) as a measure of export diversification. Together with additional control variables, these two variables are a

meaningful characterization of each country's diversification-convergence, which will be affected by the interaction between policy and institutional variables.

We first identify the determinants of diversification and convergence at the regional level. Then, we re-estimate the model for sub-samples that capture two different diversification-convergence scenarios in each sub region. The first sub-sample, denoted as the HIGH-regime, comprises countries that simultaneously exhibit high diversification and high convergence $\{y_{gap} < 0.945 \text{ \& } neq5 > 4.5\}$ while the second, the LOW-regime, comprises those that exhibit the opposite combination $\{y_{gap} \geq 0.945 \text{ \& } neq5 \leq 4.5\}$. This strategy allows us to highlight differences and commonalities in performance across regimes and regions including regional benchmarks, viz Senegal for ECOWAS and Mauritius and South Africa for SADC.

The principal differences are that ECOWAS HIGH-regime countries are becoming more diversified whilst those of SADC are becoming less diversified. Opening up to trade is also an important driver of both convergence and diversification for the former, especially in the range of 45-75% of GDP, but not for the latter. In SADC HIGH-regime countries, economic and political freedom drive convergence, suggesting effective institutional arrangements.

As for the commonalities or lessons present in the HIGH-regimes, we find that: 1) the expected 2-way relationship always exists; 2) convergence always entails macroeconomic stability (inflation $< 9\%$, budget deficits $< 7\%$ of GDP); 3) political and economic freedoms are always greater, on average, when compared to the other cases; 4) freedoms always affect diversification policy as do government deficits, albeit in different directions across both sub regions. However, increasing deficits always counteract prevailing diversification stance in both sub regions, which we take to be a sign of regime credibility. The comparison across sub

regions, meanwhile, serves to highlight the importance of institutions irrespective of the sample chosen: economic freedom always affects diversification in ECOWAS while both freedoms affect it in SADC, where they affect convergence too.

Based on the estimated impact that Cape Verde and Mozambique have on their respective sub regions, we conclude that these lessons also apply - reinforcing the perception that Cape Verde and Mozambique are example of development successes in SSA and in its west and Southern sub regions. As such, these two case studies of positive G&G interaction in SSA reflect on the potential for cooperative governance and peer-review mechanisms outside of its usual domain among OECD and EU members countries.

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*(Income Gap to Frontier, Country and U.S. GDP per capita, constant 2000 US\$;
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Table 3. 1: MDGs in PALOP 2009 vs 2007

Indic	1 pov	2 schl	3 rat	4 <5m	5 mm	6 dis	7 wat
A	S	R	S	R	R	R	C
CV	A	R	A	A	A		A
GB	R	S	S	R	R	R	A
M	S	C	S	S	S	R	S
STP	R	A	A	S	R	□	A
% sat	20%	40%	40%	20%	20%	0%	80%
A	R	S	S	S	S	R	S
CV	R	A	A	S	A		C
GB	S	A	A	S	S	S	A
M	S	C	C	S	S		S
STP	R	R	S	S	R	S	
% sat	0%	60%	60%	0%	20%	0%	40%

Source: IICT (2007a); note: satisfactory=achieved+on course

Table 3.2: Millennium Development Goals

1 Share of poorest quintile in national consumption (%)

Cape Verde	4.4	1990-2003	
ECOWAS	5.3		
Mozambique	5.5	1991-2004	
SADC	5.0		

2 Net enrolment ratio in primary education

	1991-2006	1991-1999	2000-2006	90's-00's
Cape Verde	942	953	938	-1,5%
ECOWAS*	575	508	602	9,5%
Mozambique	614	470	663	19,3%
SADC**	808	720	835	11,5%

* except Sierra Leone

**excluding Angola and DR Congo due to insufficient data

3 Ratio of girls to boys in primary education

Cape Verde	95	95	96	0,6%
ECOWAS	80	75	81	7,8%
Mozambique	79	74	81	9,0%
SADC	91	92	91	-1,4%

4 Children under five mortality rate per 1,000 live births

	1990	1995	2000	2005	2006
Cape Verde	60	50	42	35	34
ECOWAS	213	207	190	181	179
	90's	00's	90's-00's		
Mozambique	224	154	-7,0%		
SADC	155	143	-1,2%		

5 Maternal mortality ratio per 100,000 live births 2005

Cape Verde	210	
ECOWAS	1027	
Mozambique	520	
SADC	819	

6 Tuberculosis incidence rate per year per 100,000 population

	90's	00's	90's-00's
Cape Verde	1642	1672	0,0%
ECOWAS	2076	2817	0,7%
Mozambique	2854	4330	1,5%
SADC	3066	4708	1,6%

7 Proportion of population using an improved drinking water source

Cape Verde	79	80	1,0%
ECOWAS	52	57	4,2%
	1995	2000	2006
Mozambique	39	41	42
SADC	57	60	63

8 Debt service as a percentage of exports of goods and services

	1990-1994	1995-1999	2000-2006
Cape Verde	136	118	82
ECOWAS	171	179	102
Mozambique	238	252	33
SADC*	132	121	71

*Except Zimbabwe, Zambia and DR Congo

Table 3.3: World Bank Governance Indicators (1996-2007)

	CV	ECOWAS	MOZ	SADC
Rule of Law	0.48	-0.75	-0.74	-0.44
Voice and Accountability	0.65	-0.51	-0.08	-0.30
Political Stability, Absence of Violence/Terrorism	0.96	-0.49	0.05	-0.24
Government Effectiveness	0.11	-0.77	-0.33	-0.38
Regulatory Quality	-0.25	-0.65	-0.47	-0.45
Control of Corruption	0.33	-0.66	-0.65	-0.39

Source: World Bank, fitted to a normal distribution centered on zero

Table 3.4: Economic Freedom Index in PALOP

	2009	2008	2007	2006	2005	2004	2003	2002
CV	61	58	57	59	58	58	56	58
MZ	56	57	56	53	56	57	59	58
A	47	47	45	44	-	-	-	-
GB	45	45	45	47	47	42	43	43

Source AEO 2009, p.74 (Heritage Foundation)

Table 3.5: Corruption Perception Index in PALOP

	RANK	INDEX	RANK	INDEX		INDEX
	2008	2008	2007	2007	YEAR	
CV	47	5,5	53	4,7	-	-
STP	121	2,7	118	2,7	-	-
M	126	2,6	111	2,8	2003	2,7
GB	158	1,9	143	2,3	-	-
A	158	1,9	147	2,2	2002	1,7

Source: AEO 2009, pp. 73, 192-193 (Transparency International)

Table 3.6: International Trade (=5, best/worst)

country/ comparator	CV	MZ	SSA	SAD	ECW	LOP	code
Exporting Firms	4	6	13	<u>16</u>	11	5	%
Time Imports	11	11	11	<u>10</u>	<u>10</u>	17	Day
Import License Days	<u>6</u>	13	18	21	16	15	Day
Foreign Technology	2	<u>33</u>	11	16	8	12	%
Foreign Shareholder	10	20	19	<u>25</u>	12	14	%

Source: World Bank Enterprise Survey

Table 3.7: Infrastructure (=5, best/worst)

country/ comparator	CV	MZ	SSA	SAD	ECW	LOP	code
# Electricity Outages	21	<u>3</u>	14	12	16	10	#/mo
# Internet Outages	4	<u>3</u>	46	32	86	<u>3</u>	#/mo
# Water Outages	13	<u>4</u>	8	6	9	7	#/mo
Transportation	36	37	44	<u>35</u>	49	40	%bad
Access to Land	<u>19</u>	26	34	31	36	28	%bad

Source: World Bank Enterprise Survey

Table 3.8: Finance, Competition, Education (best/worst)

country/ comparator	CV	MZ	SSA	SAD	ECW	LOP	code
Credit Line	<u>47</u>	13	24	24	20	17	%good
Investment Own Funds	51	<u>88</u>	77	74	80	78	%good
Access to Finance	<u>48</u>	62	60	51	68	64	%bad
Number Competitors	4	<u>3</u>	4	4	4	4	#
Education Workers	43	33	34	37	<u>28</u>	32	%bad

Source: World Bank Enterprise Survey

Table 3.9: Institutions - stability, corruption, rule of law (best/worst)

country/ comparator	CV	MZ	SSA	SAD	ECW	LOP	code
STAB Crime theft and disorder	47	50	41	49	<u>35</u>	45	%bad
CORR Corruption	<u>25</u>	37	46	43	48	42	%bad
CORR Informal Payments	<u>0</u>	2	5	3	5	2	%bad
JUST Sales on Credit	30	<u>19</u>	29	36	25	<u>19</u>	%bad
JUST Government Predictability	59	<u>21</u>	49	50	47	29	%good
JUST Court Impartiality	62	<u>15</u>	44	46	44	30	%good
JUST Legal conflict resolution	29	<u>14</u>	23	21	25	27	%bad

Source: World Bank Enterprise Survey

Table 3.10: Quality of regulation (best/worst)

country/ comparator	CV	MZ	SSA	SAD	ECW	LOP	code
Time Senior Mgt Regulations	14	<u>4</u>	7	8	8	7	%bad
Tax administration	41	<u>31</u>	46	36	48	36	%bad
Tax rates	74	<u>53</u>	59	51	61	57	%bad
Licensing Permits	<u>29</u>	30	33	29	33	37	%bad
Labor Regulations	28	17	20	21	<u>16</u>	18	%bad
Customs & Trade Regulations	38	<u>26</u>	33	28	30	33	%bad

Source: World Bank Enterprise Survey

Table 4.1a: Diversification and Convergence in ECOWAS - 3SLS Estimation Results

Variable Type	Variable	LOW-Regime Sub-sample		FULL Sample		HIGH-Regime Sub-sample	
		lnygap	lnneq5	lnygap	lnneq5	lnygap	lnneq5
Policy	lnygap		-0.569*** (-3.326)		-0.398*** (-3.812)		-0.751*** (-4.000)
	lnneq5	-0.0972 (-1.139)		0.189** (2.409)		-0.646*** (-3.798)	
	inflation1	-0.0344** (-2.491)	0.0530* (1.799)	-0.0368*** (-3.400)			
	govdef	0.000174 (0.0435)	0.0457*** (4.744)			-0.00618 (-1.407)	-0.0153** (-2.291)
	lnopen1					-0.185** (-2.112)	-0.229** (-2.156)
Institutional	lnprcl	-0.0147 (-0.339)	-0.157 (-1.646)	-0.172*** (-2.723)	0.0620 (0.579)	-0.0477 (-0.395)	0.299** (2.157)
	lnef	0.114 (1.487)	0.399* (1.888)	-0.497*** (-2.606)	0.840*** (2.710)	0.201 (0.456)	1.610*** (2.923)
	demage	-0.0319*** (-3.498)		-0.0312*** (-2.963)	-0.0444* (-1.879)		
	demt0t			0.00804*** (11.12)			
	dictrans		-0.179** (-2.459)				
Control	lnk	-0.107*** (-4.441)		-0.0879*** (-3.290)			
	lnltotal					0.961*** (4.396)	
	lnpopdens				0.191*** (3.293)		
Dummies	capcont		0.666*** (5.132)		0.552*** (3.193)		
	landlock	0.345*** (7.128)		0.322*** (4.163)	0.322*** (4.163)		
	oil			-0.427*** (-7.158)	-0.427*** (-7.158)	-3.601*** (-4.657)	
	cpv			-0.299*** (-3.267)	0.438** (2.346)		
	sen			-0.370*** (-6.040)	0.504*** (4.982)	-2.827*** (-3.871)	0.473*** (6.759)
	legaleng			-0.108** (-2.347)		-2.418*** (-4.918)	
	Constant	6.254*** (14.00)	2.790*** (3.268)	5.469*** (11.34)	0.904 (1.426)	-5.875** (-2.359)	2.334* (1.828)
Model Diagnostics	Observations	40	40	99	99	32	32
	R-squared	0.860	0.703	0.876	0.604	0.866	0.688
	F test	30.87	13.95	62.61	18.63	44.60	14.27
	Prob > F	0	0	0	0	0	0

t-statistics in parentheses *** p<0.01, ** p<0.05, * p<0.1

Table 4.1b: Diversification and Convergence in SADC - 3SLS Estimation Results

Variable Type	Variable	LOW-Regime Sub-sample		FULL Sample		HIGH-Regime Sub-sample	
		lnygap	lnneq5	lnygap	lnneq5	lnygap	lnneq5
Policy	lnygap		1.340*** (6.654)		-0.782*** (-9.407)		-1.067*** (-6.012)
	lnneq5	0.617*** (6.624)		-0.276** (-2.571)		-0.659*** (-5.961)	
	inflation1	0.0533*** (2.662)	-0.0765** (-2.532)				
	govdef			-0.0399*** (-6.492)	-0.0517*** (-4.202)	0.0259 (1.322)	0.0649*** (2.836)
Institutional	lnopen1	0.779*** (6.829)	-1.160*** (-7.293)	-0.276 (-1.622)	-0.691*** (-2.813)		
	lnprcl	-0.812*** (-10.64)	1.070*** (5.112)	-0.147** (-2.458)	-0.182** (-1.969)	-0.396*** (-4.609)	-0.323** (-2.028)
	lnef	-1.171*** (-6.261)	1.751*** (6.795)	0.766*** (4.175)	1.526*** (6.154)	-2.386*** (-6.059)	-2.306*** (-2.991)
	constage				0.00610** (2.537)		
Control	demage	0.121*** (5.235)	-0.169*** (-4.294)		-0.0179* (-1.686)		
	demtot	0.0127*** (8.015)	-0.0160*** (-3.998)				
	lnk			-0.412*** (-9.979)			
	lnltotal			0.379*** (6.551)	0.419*** (4.502)		
Dummies	landlock			0.152* (1.806)	0.859*** (4.352)		
	mus			-0.833*** (-5.429)		-0.972*** (-4.263)	-1.578*** (-9.644)
	moz			-0.728*** (-4.403)	-1.313*** (-4.507)		
	legaleng				-0.750*** (-3.485)		
	Constant	1.856*** (3.672)	-2.137** (-2.285)	6.939*** (5.027)	-1.130 (-0.488)	9.409*** (12.76)	10.55*** (5.822)
Model Diagnostics	Observations	39	39	156	156	51	51
	R-squared	0.850	0.645	0.893	0.530	0.847	0.745
	F test	48.47	19.68	150.1	30.28	76.55	38.08
	Prob > F	0	0	0	0	0	0

t-statistics in parentheses *** p<0.01, ** p<0.05, * p<0.1

FIGURES

(Available in separate file)

APPENDIX 1

Data Description

Variable Type	Variable	Description	Source	
Policy	ygap	Income Gap to Frontier (Country and U.S. GDP per capita, constant 2000 US\$) – see text for definition	Own calculations	
	ypc	GDP per capita (constant 2000 US\$)	World Bank	
	neq 1,2,3,4,5	Number Equivalent Index (1,2,3,4,5 digit SITC rev2)	OECD	
	inflation1	Inflation, consumer prices (annual %)	World Bank	
	govdef	Government Surplus/Deficit (% GDP)	World Bank	
	open1	Exports plus Import (% of GDP)	World Bank	
	reer	Real Effective Exchange Rate (%)	IFS	
	emp	Exchange Market Pressure (%)	Own calculations	
Institutions	pr	Index of Political Rights	Freedom House	
	cl	Index of Civil Liberties	Freedom House	
	ef	Index of Economic Freedom	Fraser Institute	
	constage	Constitutional Age	Polity	
	demage	Age of Democracy	Polity	
	demtot	Number of other Democracies in System	Polity	
	dictrans	Number of Prior Transitions to Dictatorship	Polity	
	Controls	k	Gross capital formation (constant 2000 US\$)	World Bank
Economic		ltotal	Labour Force, total	World Bank
Geographic		land	Land (sq. km)	World Bank
		landagri	Agricultural land (% of land area)	World Bank
		landarbl	Arable land (% of land area)	World Bank
		disteur	Minimum distance to the European Union	CEPII
Demographic		poptotal	Population, total	World Bank
		popdens	Population density (people per	World Bank
		popurban	Urban dwellers (% Population)	World Bank
		life	Life expectancy at birth, total (years)	World Bank
Dummies	landlock	Landlocked countries	United Nations	
	Economic	oil	Net Oil Exporter	United Nations
	capcont	Capital Controls	IMF	
	legaleng	British Legal Origin	Polity	
	cpv	Cape Verde	IFS Country Codes	
	gha	Ghana	IFS Country Codes	
	mus	Mauritius	IFS Country Codes	
	moz	Mozambique	IFS Country Codes	
	sen	Senegal	IFS Country Codes	
	zaf	South Africa	IFS Country Codes	

The acronyms of the different variables used in the regressions are given above. The data are annual and cover the period 1960-2004 but some variables have shorter spans (e.g. data on political and civil liberties, economic freedom) as these only became available later. Regarding the indices of freedoms, we rank them as follows:

pr & cl	ef
7 = maximum political rights	10 = maximum economic liberties
1 = minimum political rights	0 = minimum economic liberties

We know that PR and CL are highly correlated and so we replace these with the average of both (hereafter, PRCL). This composite indicator performed better in estimations and in addition, also has the advantage as being interpretable as an index of political freedom, given that it captures its two main constituent components. We also note that these measures must be used and interpreted with caution due to well known issues, most of which derive from the process of index construction itself. This caveat should be borne in mind when reading some of our results. We use Eichengreen and Leblang's (2006) measure, "Age of Democracy," which counts for each country i at time t the number of uninterrupted year up to time t that country i has been democratic, i.e. its measures the length of time a country has been a democracy. We also employ data from the POLITY project, which codes countries' level of democracy as a function of institutional rules. POLITY is also the source of information on constitutional age. POLITY defines constitutional change as occurring either when there is a political transition or when the absolute value of the score changes by at least three points. This allows for constitutional changes in both democracies and dictatorships. Capital controls are measured in the manner of the International Monetary Fund's Annual Report on Exchange Arrangements and Exchange Restrictions (EAER), supplemented with historical sources introduced by Eichengreen and Leblang's (2006). EAER seeks to capture whether there are explicit legal restrictions on capital transitions.

Table A1.1 - Summary Statistics (all variables)

ECOWAS						
Variable	Obs.	Mean	Median	Std. Dev.	Minimum	Maximum
ygap	675.00	0.95	0.95	0.02	0.86	0.99
ypc	612.00	356.70	284.39	217.94	56.47	1266.81
neq5	637.00	3.83	3.46	2.09	1.00	15.12
inflation1	574.00	12.83	6.89	20.09	-34.40	178.70
govdef	450.00	-5.70	-4.65	9.19	-57.26	27.17
open1	592.00	59.01	54.58	26.57	6.32	140.86
reer	144.00	-0.04	-0.01	0.26	-1.88	0.79
pr	490.00	2.87	2.00	1.78	1.00	7.00
cl	490.00	3.23	3.00	1.34	1.00	7.00
prcl	490.00	3.05	2.50	1.50	1.00	7.00
constage	596.00	13.11	7.00	19.98	0.00	105.00
demage	660.00	0.72	0.00	2.16	0.00	14.00
demt0t	660.00	64.72	54.50	26.48	36.00	110.00
dictrans	626.00	0.39	0.00	0.73	0.00	3.00
k	415.00	4.35e+08	3.00e+08	5.04e+08	4.90e+06	3.60e+09
ltotal	375.00	4.97e+06	2.66e+06	8.95e+06	88445.88	5.00e+07
disteur	675.00	4889.93	5020.85	302.59	4244.89	5283.33
landagri	660.00	42.49	41.81	17.32	13.04	81.40
land	660.00	335343.33	192530.00	415989.64	4030.00	1.27e+06
landarbl	660.00	12.39	9.43	9.89	1.34	46.15
poptotal	675.00	1.01e+07	4.49e+06	2.06e+07	196351.00	1.38e+08
popdens	660.00	42.83	35.96	31.32	2.49	157.07
popurban	576.00	0.11	0.10	0.08	0.00	0.39
life	240.00	47.50	46.90	7.75	32.28	69.84
SADC						
ygap	630	0.9	0.94	0.08	0.6	0.99
ypc	507	945.54	459.1	1040.85	81.01	4264.32
neq5	554	6.47	4.96	5.75	1	36.09
inflation1	495	109.59	12.14	1114.9	-9.62	23773.13
govdef	370	-7.37	-6.15	10.29	-54.09	32.68
open1	502	80.63	68.23	40.54	14.33	198.91
reer	129	-0.02	-0.02	0.2	-0.91	1
pr	441	3.38	3	1.85	1	7
cl	441	3.41	3	1.56	1	7
prcl	441	3.4	3	1.65	1	7
constage	509	13.06	8	16.35	0	81
demage	600	1.76	0	5.53	0	37
demt0t	600	65.02	55.5	26.72	35	110
dictrans	572	0.15	0	0.36	0	1
k	466	2.03E+09	4.35E+08	4.85E+09	2.26E+06	2.79E+10
ltotal	350	5.60E+06	4.28E+06	5.69E+06	170025.2	2.28E+07
disteur	630	8253.78	8491.14	978.51	6257.08	9571.16
landagri	616	50.26	46.94	20.09	9.68	87.97
land	616	688990	662465	596625.63	2030	2.27E+06
landarbl	616	9.62	6.77	11.76	0.61	49.26
poptotal	630	1.02E+07	6.74E+06	1.14E+07	326000	5.69E+07
popdens	616	55.93	18.2	121.74	0.75	607.58
popurban	497	0.14	0.13	0.13	0	0.78
life	237	50.9	49.25	8.69	33.19	71.97

Table A1.2 - Correlations (final model variables only)

	lnygap	lnneq5	inflation1	govdef	lnopen1	lnprcl	lnef	constage	demage	demtota	dictrans	lnk	lnpopdens
lnygap	1												
lnneq5	-0.126	1											
inflation1	0.08	-0.012	1										
govdef	-0.128	-0.043	-0.011	1									
lnopen1	-0.396	-0.027	-0.016	-0.017	1								
lnprcl	-0.242	0.18	-0.042	0.035	0.212	1							
lnef	-0.264	0.296	-0.09	0.069	0.321	0.362	1						
constage	-0.225	0.176	-0.038	0.102	0.246	0.022	0.148	1					
demage	-0.189	0.073	-0.013	0.009	0.143	0.376	0.282	0.008	1				
demtota	0.244	0.064	0.044	-0.148	0.162	0.26	0.282	-0.01	0.24	1			
dictrans	0.042	0.003	-0.018	-0.04	-0.183	0.202	-0.046	-0.121	0.266	0.241	1		
lnk	-0.392	0.335	-0.035	0.15	-0.084	0.096	0.221	0.427	0.031	0.123	0.243	1	
lnpopdens	0.107	0.144	-0.013	-0.129	-0.104	0.24	0.074	-0.046	0.283	0.246	0.19	-0.029	1

APPENDIX 2

OLS and 2SLS Estimation Results

Table A2.1a: Determinants of Diversification in ECOWAS

Variable Type	Variables	OLS Pooled lnneq5	OLS Random Effects lnneq5	OLS Between Effects lnneq5	OLS Fixed Effects lnneq5
Policy	lnygap	-0.263*** (-3.550)	-0.241*** (-2.812)	-0.793*** (-3.626)	-0.214** (-2.711)
	govdef	-0.0109*** (-2.971)	-0.0106*** (-2.677)		
Institutions	lnprcl	0.0484 (0.908)	0.0651 (1.203)		0.0875 (1.069)
	lnef	0.264** (2.217)	0.380*** (3.418)		0.516** (2.282)
	demage	-0.0353* (-1.945)	-0.0482** (-2.367)		-0.0483*** (-3.787)
	demt看				-0.00773* (-2.029)
Control	lnpopdens	0.208*** (4.100)	0.176*** (2.678)		
	lnltotal				1.164** (2.333)
	lndisteur	7.313*** (6.185)	7.262*** (3.515)		
Dummies	landlock	0.811*** (3.717)	0.766** (2.115)		
	cpv	0.609*** (4.280)	0.760*** (4.196)		
	gha	-1.200*** (-20.55)	-1.225*** (-13.54)	-0.861*** (-3.362)	
	sen	1.267*** (8.722)	1.292*** (5.502)		
	legaleng	-0.123** (-1.984)			
	Constant	-61.19*** (-5.967)	-60.95*** (-3.426)	4.423*** (5.035)	-15.48** (-2.168)
Model Diagnostics	Observations	223	223	592	228
	R-squared	0.853		0.635	0.171
	Adjusted R-squared	0.844		0.574	0.149
	F test	318.2		10.44	30.54
	Prob > F	0		0.00236	9.52e-07
	Number of countries		14	15	14
	R-squared within model		0.151		
	R-squared between model		0.954		
	R-squared overall model		0.848		
	Wald Chi2		973.2		
	Prob > W		0		

Robust t-statistics in parentheses (except for the case of between effects) *** p<0.01, ** p<0.05, * p<0.1

Table A2.1a (continued): Determinants of Diversification in ECOWAS

Variable Type	Variables	2SLS Random Effects lnneq5	2SLS Between Effects lnneq5	2SLS Fixed Effects lnneq5
Policy	lnygap	-0.138 (-1.599)	-0.945*** (-3.910)	-0.358** (-2.501)
Institutions	lnprcl	0.149** (2.473)		0.130** (2.216)
	lnef	0.374*** (3.226)		0.351*** (2.852)
	damage	-0.0342** (-1.991)		-0.0334* (-1.816)
	demt0t			-0.00852*** (-2.929)
Control	lnpopdens	0.210** (2.409)		
	lnltotal			1.463*** (4.074)
	Indisteur	7.244*** (4.097)		
Dummies	landlock	0.750** (2.345)		
	cpv	0.599** (2.536)		
	gha	-1.290*** (-7.445)	-1.409*** (-5.242)	
	sen	1.275*** (5.474)		
	Constant	-61.34*** (-4.051)	5.183*** (5.256)	
Model Diagnostics	Observations	200	315	183
	R-squared			0.227
	Adjusted R-squared		0.721	0.138
	Number of countries	13	14	13
	R-squared within model	0.153	0.0278	
	R-squared between model	0.966	0.764	
	R-squared overall model	0.860	0.328	
	F test	0	0.000370	0
	Prob > F		0.721	0.138

t-statistics in parentheses (robust in the case of fixed effects) *** p<0.01, ** p<0.05, * p<0.1

Table A2.1b Determinants of Diversification in SADC

Variable Type	Variables	OLS Pooled lnneq5	OLS Random Effects lnneq5	OLS Between Effects lnneq5	OLS Fixed Effects lnneq5
Policy	lnygap	-0.132*** (-2.839)		-0.315 (-1.626)	
	lnopenl	-0.468*** (-7.422)			
Institutions	lnef	0.803*** (5.081)	0.886*** (4.988)	2.278*** (3.327)	0.619*** (4.274)
	dictrans		-0.328*** (-3.793)		
Physical	lnk				0.148* (1.839)
	lnpopdens				-4.949*** (-3.108)
	lnltotal			0.471*** (4.570)	4.155** (2.635)
	landlock				
	mdg	0.633*** (5.062)	0.972* (1.847)		
	moz	-0.275** (-1.997)		-0.805* (-1.912)	
	tza	0.584*** (7.243)			
	zaf	1.197*** (9.883)	1.557** (2.364)		
	zwe	0.854*** (9.927)	0.963*** (2.668)		
	Constant	2.619*** (4.926)	0.0189 (0.0657)	-7.705*** (-3.539)	-48.18** (-2.538)
Model Diagnostics	Observations	254	290	217	237
	Number of countries		14	14	13
	R-squared	0.641		0.789	0.142
	Adjusted R-squared	0.630		0.696	0.127
	R-squared within model		0.0964		
	R-squared between model		0.672		
	R-squared overall model		0.555		
	F test	67.08		8.439	10.31
	Prob > F	0		0.00410	0.00122
	Wald Chi2		49.57		
	Prob > W		1.70e-09		

Robust t-statistics in parentheses (except for the case of between effects) *** p<0.01, ** p<0.05, * p<0.1

Table A2.1b (continued): Determinants of Diversification in SADC

Variable Type	Variables	2SLS Random Effects lnneq5	2SLS Between Effects lnneq5	2SLS Fixed Effects lnneq5
Policy	lnygap	-0.380*** (-3.976)	-0.242* (-2.164)	-0.310** (-2.091)
Institutions	lnef	0.936*** (5.791)	2.505*** (3.831)	1.196*** (6.992)
	constage	0.00611*** (3.427)		0.00602** (2.006)
Physical	lnpopdens			-4.974*** (-3.415)
	lnltotal	0.401*** (5.909)	0.512*** (9.075)	4.415*** (3.587)
	moz		-0.508* (-2.273)	
	zwe	0.753** (2.603)	0.628** (2.897)	
	Constant	-4.563*** (-5.020)	-9.092*** (-5.444)	
Model Diagnostics	Observations	156	156	156
	Number of countries	12	12	12
	R-squared			0.350
	Adjusted R-squared		0.899	0.270
	R-squared within model	0.258	0.148	
	R-squared between model	0.850	0.945	
	R-squared overall model	0.734	0.663	
	F test	19.62	20.63	35.51
	Prob > F	0	0.00102	0

t-statistics in parentheses (robust in the case of fixed effects) *** p<0.01, ** p<0.05, * p<0.1

Table A2.2a: Determinants of Convergence in ECOWAS

Variable Type	Variables	OLS Pooled lnygap	OLS Random Effects lnygap	OLS Between Effects lnygap	OLS Fixed Effects lnygap
Policy	lnneq5	-0.157*** (-5.848)		-0.340*** (-3.680)	
	inflation1		-0.0435*** (-3.658)		
	govdef				-0.00222* (-1.932)
	lnopen1				-0.0498*** -0.00222*
Institutions	lnprcl	-0.0764*** (-2.827)	-0.0833** (-2.166)	-0.414** (-2.475)	
	lnef		-0.309*** (-5.831)		-0.166** (-2.460)
	demage	-0.0696*** (-10.44)	-0.0504*** (-6.215)		-0.0216** (-3.153)
	demt0t	0.00897*** (22.17)	0.192*** (6.243)		-0.00162** (-2.610)
	dictrans	0.148*** (5.416)	0.00828*** (15.00)		
Control	lnk				-0.0830*** (-3.922)
	lnpopdens				-3.145** (-2.720)
	lnltotal				4.296*** (3.737)
	landlock	0.0997*** (2.932)	0.209*** (3.945)		
Dummies	oil	-0.610*** (-18.17)	-0.497*** (-7.637)	-0.564*** (-4.766)	
	cpv		-0.219*** (-4.714)		
	gha	-0.351*** (-6.363)	-0.452*** (-9.250)		
	sen	-0.379*** (-10.07)	-0.359*** (-7.010)		
	legaleng	-0.212*** (-6.335)	-0.133*** (-3.417)		
	Constant	3.880*** (65.32)	4.177*** (44.93)	4.975*** (30.59)	-45.71*** (-3.491)
Model Diagnostics	Observations	441	181	444	140
	R-squared	0.732		0.811	0.917
	Adjusted R-squared	0.725		0.759	0.912
	F test	154.7		15.73	64.62
	Prob > F	0		0.000271	9.04e-06
	Number of countries		13	15	11
	R-squared within model		0.739		
	R-squared between model		0.920		
	R-squared overall model		0.849		
	Wald Chi2		785.3		
	Prob > W		0		

Robust t-statistics in parentheses (except for the case of between effects) *** p<0.01, ** p<0.05, * p<0.1

Table A2.2a (continued): Determinants of Convergence in ECOWAS

Variable Type	Variables	2SLS Random Effects lnygap	2SLS Between Effects lnygap	2SLS Fixed Effects lnygap
Policy	lnneq5	0.790*** (5.400)	-0.326*** (-3.613)	
	lnopen1			-0.0728*** (-4.100)
Institutions	lnprcl	-0.234*** (-4.391)		
	lnnef			-0.178*** (-4.876)
	damage		-0.0868** (-2.702)	
	demptot	0.00622*** (6.262)	0.0150*** (3.338)	-0.00242*** (-4.113)
Control	lnk	-0.197*** (-6.001)		-0.0901*** (-5.150)
	lnpopdens			-3.222*** (-5.026)
	lnltotal			4.506*** (7.162)
Dummies	landlock	0.606*** (6.985)		
	oil	-0.401*** (-3.704)	-0.530*** (-4.506)	
	cpv	-0.537*** (-4.387)		
	sen	-0.494*** (-4.256)		
	Constant	6.577*** (11.71)	3.507*** (9.792)	
Model Diagnostics	Observations	208	313	118
	R-squared			0.939
	Adjusted R-squared		0.762	0.930
	Number of countries	10	14	10
	R-squared within model	0.371	0.566	
	R-squared between model	0.913	0.835	
	R-squared overall model	0.613	0.654	
	F test	28.90	11.42	215.7
	Prob > F	0	0	0

t-statistics in parentheses (robust in the case of fixed effects) *** p<0.01, ** p<0.05, * p<0.1

Table A2.2b: Determinants of Convergence in SADC

Variable Type	Variables	OLS Pooled lnygap	OLS Random Effects lnygap	OLS Between Effects lnygap	OLS Fixed Effects lnygap
Policy	lnneq5	-0.222*** (-6.120)	-0.0351 (-1.193)		
	open1			-0.532** (-2.327)	
	lninflation1				0.0327** (2.304)
Institutions	lnprcl		-0.0549* (-1.704)		-0.166** (-2.545)
	lnef			-1.940*** (-3.707)	
	demage	-0.00638* (-1.678)		-0.0553** (-2.479)	
	demtot				0.00759*** (5.016)
	dictrans	0.262*** (5.978)	0.184*** (3.649)		
Physical	lnk	-0.138*** (-3.798)	-0.286*** (-9.104)		-0.349*** (-5.390)
	lnpopdens	0.165*** (9.680)			
	lnltotal	0.401*** (18.00)	0.510*** (7.454)		
	oil	0.239** (2.392)			
	moz	-0.302*** (-4.752)			
	mus	-1.707*** (-15.81)	-1.014*** (-6.400)		
	zaf	-1.247*** (-11.66)	-1.098*** (-4.958)	-1.235** (-2.740)	
	Constant	0.642 (0.949)	2.281** (2.221)	9.321*** (7.609)	10.31*** (8.000)
Model Diagnostics	Observations	265	253	254	278
	Number of countries		13	14	12
	R-squared	0.898		0.845	0.657
	Adjusted R-squared	0.894		0.776	0.652
	R-squared within model		0.471		
	R-squared between model		0.917		
	R-squared overall model		0.891		
	F test	640.6		12.26	13.21
	Prob > F	0		0.00109	0.000576
	Wald Chi2		362.8		
	Prob > W		0		

Robust t-statistics in parentheses (except for the case of between effects) *** p<0.01, ** p<0.05, * p<0.1

Table A2.2b (continued): Determinants of Convergence in SADC

Variable Type	Variables	2SLS Random Effects lnygap	2SLS Between Effects lnygap	2SLS Fixed Effects lnygap
Policy	inflation1	-0.356*** (-3.216)	-0.600 (-1.633)	-0.101 (-1.098)
Institutions	lnprcl		-5.893*** (-3.645)	
	lnef		-1.389* (-2.280)	-0.120*** (-3.065)
	demage	-0.591*** (-6.474)		-0.372*** (-4.585)
	demt0t	-0.591*** (-6.474)		-0.372*** (-4.585)
Physical	lnk	-0.591*** (-6.474)		-0.372*** (-4.585)
	lnltotal	0.561*** (6.187)		0.730*** (5.226)
	Constant	8.115*** (4.910)	16.42*** (4.400)	
Model Diagnostics	Observations	190	178	190
	Number of countries	12	12	12
	R-squared			0.358
	Adjusted R-squared		0.690	0.299
	R-squared within model	0.191	0.0726	
	R-squared between model	0.919	0.775	
	R-squared overall model	0.809	0.235	
	F test	24.09	10.11	22.96
	Prob > F	0	0.00426	0

t-statistics in parentheses (robust in the case of fixed effects) *** p<0.01, ** p<0.05, * p<0.1